

Amendments to the Specification

Please replace paragraph [0022] on pg. 9 with the following amended paragraph:

[0022] The relationship information 64 may include a plurality of relationship assignments, one for each volume for which the storage controller is designated as a master or slave. FIG. 3 illustrates information included in a relationship assignment 80. A relationship identification field 82 indicates an ID of a consistency group copy relationship because there may be many relationships, each assigned a group of volumes, across the storage controllers 4a, 4b, 4c. Thus, a storage controller 4a, 4b, 4c may be a master for multiple consistency group relationships, or have volumes that are slaves in different relationships. The master-slave field 84 indicates whether the assignment is for a master or slave relationship. If the master-slave indicator 84 specifies "master", then that storage controller, e.g., 4c, including that assignment 80, is a master in the master-slave relationship identified in field [[82]] 84 for the volume indicated in the volume information 88 managed by the storage controller, e.g., 4a or 4b, indicated in the storage controller information 86. Likewise, if the master-slave indicator [[82]] 84 specifies "slave", then the volume in the attached storage, e.g., 6a or 6b, indicated in the volume information 88, is a slave in the relationship identified in field [[82]] 84 to the master storage controller, e.g., 4c, indicated in the storage controller information 86. A master storage controller, e.g., 4c, may be assigned a slave volume that is in storage, e.g., 6a, 6b, attached to another storage controller, e.g., 4a, 4b, or is in the storage, e.g., 6c, attached to the master storage controller, e.g., 4c. Thus, a master may be assigned slave volumes in the attached storage and/or in storage systems attached to other storage controllers. Further, a storage controller may be assigned as a master for volumes in the attached storage and/or storages managed by other storage controllers and, at the same time, include volumes that are assigned as slaves to a master, where that master may be the storage controller itself or another storage controller.

Please replace paragraph [0031] on pgs. 13-14 with the following amended paragraph:

[0031] Further, storage controllers asynchronously copying the data indicated in their out-of-synch (OOS) 66 bitmaps to the remote storage may perform conflict management operations. For instance, if a storage controller 4a, 4b, 4c receives an update to a track whose corresponding bit in the OOS 66 is set to indicate that there already is an update for that track that has not yet been copied over to the remote site, where such older update may or may not be part of a

consistency group, then the storage controller 4a, 4b, 4c may take action to avoid overwriting the older update until such update has been copied over. Such conflict management would ensure an older update that is part of a consistency group is copied to the remote site to ensure consistency at the time of formation of the consistency group. In certain implementations, the storage controller receiving the update may queue the update until the older update is copied over to the remote site. Alternatively, the storage controller may return a "fail" to the update while there is a pending update to copy over. Additional details of managing conflicts with updated tracks indicated in the OOS are described in the copending and commonly assigned patent application entitled "Method, System, and Program for Asynchronous Copy", having ~~attorney docket no. TUC920030119US1~~ U.S. Application Serial No. 10/675,317, which patent application is incorporated herein by reference in its entirety and filed on September 29, 2003 ~~the same date~~ hereof.